Regional Update EW 40
Influenza
(October 18, 2011 - 17 h GMT; 12 h EST)

PAHO interactive influenza data: http://ais.paho.org/phip/viz/ed_flu.asp
Influenza Regional Reports: www.paho.org/influenzareports

The information presented in this update is based on data provided by Ministries of Health and National Influenza Centers of Member States to the Pan American Health Organization (PAHO) or from updates on the Member States’ Ministry of Health web pages.

- In North America, influenza activity remains low.
- In Central America and the Caribbean, the predominance of respiratory syncytial virus (RSV) continued (Cuba, Guatemala). Among influenza viruses, influenza A/H3N2 (Cuba, Honduras and Nicaragua) and influenza A(H1N1) pm09 (El Salvador, Nicaragua and Dominican Republic) predominated with variable co-circulation of influenza B (Dominican Republic and Guatemala).
- In the Southern Cone, in EW 38, RSV circulation continued to decrease (Chile and Argentina). Variable co-circulation of influenza A(H1N1) pm09 and influenza A/H3 was reported (Bolivia, Colombia) and also influenza B circulated (Bolivia).

Epidemiologic and virologic influenza update

North America

In Canada\(^1\), in epidemiological weeks (EWs) 39 and 40, influenza activity continued at inter-seasonal levels. Influenza-like Illness (ILI) consultation rates were 20.4 (EW 39) and 18.6 (EW 40) per 1,000 consultations; remaining slightly above and within the expected levels for this time of year. Compared to other age groups, a higher ILI consultation rate was observed among children less than 5 years old in EW 39, and children between 5 and 19 years old in EW 40. Few influenza detections were reported in EW 39 and 40, and the percentage of samples positive for influenza was less than 1%, as was observed in previous EWs. The influenza viruses detected were unsubtyped influenza A, influenza A/H3N2 and influenza B.

In the United States\(^2\), in EW 40, at the national level, the proportion of ILI consultations (~1%) remained below the national baseline (2.4%). The proportion of deaths attributed to pneumonia and influenza for EW 40 (6%) was lower than the epidemic threshold for this time of year (6.5%). In EW 40, no pediatric deaths associated with influenza were reported. During EW 40, among all samples tested \((n=1343)\), the percentage of samples positive for influenza continued to remain low (<2%), with sporadic detections of unsubtyped influenza A, influenza B, influenza A/H3 and influenza A(H1N1) pm09.

In Mexico, in EW 40, according to laboratory data, of total samples received \((n=54)\), no samples were positive for respiratory viruses. Since EW 17, influenza and other respiratory virus activity has remained low.

Caribbean

CAREC\(^3\), in EW 40, received epidemiological information from Barbados, Jamaica, San Vincents and the Grenadines and Tobago. The proportion of admissions for Severe Acute Respiratory Infection (SARI) among all hospitalizations (3.3%) increased slightly respect to the previous week (2.9%). Children aged 6-48 months had the highest rate of SARI hospitalizations (6.9%), followed by those 5-14 years old (6.4%). No SARI-related deaths were reported during EW 40. According to laboratory data, in EW 39 no samples positive for respiratory viruses were detected; however, in recent weeks, RSV and rhinovirus were the primary viruses identified.

\(^1\) Includes Barbados, Dominica, Jamaica, St Vincents and the Grenadines, St Lucia, and Trinidad and Tobago
In Cuba, in EW 40, among all samples tested (n=194), ~60% were positive for respiratory viruses and ~4% of all samples tested were positive for influenza. Circulation of RSV has been increasing since EW 29, and detection of other respiratory viruses increased as compared to the previous week, while influenza A/H3 has been decreasing since its peak in EW 37.

In the Dominican Republic, according to laboratory data, in EW 41, among all samples tested (n=21), the percentage of samples positive for respiratory viruses was ~30%, which was higher than the previous week. The primary virus in circulation was influenza B, followed by RSV and influenza A(H1N1) pmd09.

Martinique\(^3\), between EW 38-40, reported a progressive increase in the number of pediatric visits for bronchiolitis associated with greater circulation of RSV, adenovirus and parainfluenza.

**Central America**

In Costa Rica, in EW 41, among all samples tested (n=142), the percentage of samples positive for respiratory viruses (~60%) increased compared to the previous week. RSV has been the predominant virus since EW 28, this week followed by parainfluenza. Among the influenza viruses, influenza A/H3 was reported.

In El Salvador, in EW 41, among all samples tested (n=11), the percentage of positive samples for respiratory viruses remained ~50%. Influenza A/H3 was the predominant virus detected between EW 35-40. In EW 41, three new cases of influenza A(H1N1) pmd09 were detected.

In Guatemala, in EW 40, according to laboratory data, of all samples tested (n=27), the percentage of samples positive for respiratory viruses was ~40%, and RSV was the primary virus detected, which has been increasing since EW 37. Among influenza viruses, influenza A/H3 and influenza B were detected.

In Honduras\(^4\), in EW 39, the proportions of ILI consultations and SARI hospitalizations were higher than the previous week, and remained slightly above expected levels as compared to the previous year. No SARI deaths were reported in EW 39. According to laboratory data, in EW 40, among all samples tested (n=18), the percentage of samples positive for respiratory viruses was ~70%; RSV has been the predominant virus since EW 35, followed by influenza A/H3.

In Nicaragua, in EW 38, the first influenza A(H1N1) pmd09 case of this year were reported. As of October 18, 2011\(^5\), at the national level, 78 confirmed cases of influenza A(H1N1) pmd09 were reported mostly in Managua (8 in Leon, 1 in Masaya and 2 in Jinotega). Seven hospitalized cases were reported. No deaths have been reported among these 78 cases. 58% of the confirmed cases occurred in children ≤14 years old.

**South America – Andean**

In Bolivia, in La Paz, in EW 39, according to the SARI surveillance data, the proportion of SARI hospitalizations, SARI ICU admissions and SARI deaths remained ≤5%. In EW 40, according to INLASA laboratory data in La Paz, among all samples tested, ~25% were positive for influenza viruses, mainly influenza A(H1N1) pmd09, followed by influenza B.

In Colombia, according to the national laboratory\(^6\), in EW 40, no positive samples for respiratory viruses were detected. During 2011, through EW 38, influenza A/H3 virus co-circulated with influenza A(H1N1) pmd09.

In Ecuador, in EW 40, at the national level the percentage of SARI hospitalizations, SARI ICU admissions and SARI deaths remained below 10%. According to laboratory data, in EW 40, of all samples tested (n=49), the percentage of samples positive for respiratory viruses slightly increased to ~15%. Among influenza viruses, co-circulation of influenza A(H1N1) pmd09 and influenza A/H3 was recently reported.

In Peru\(^7\), in EW 39, at the national level, the number of ARI and pneumonia cases in children less than 5 years old decreased, as compared to the previous week and remained below the expected level for this time of year. Through EW 39 of 2011, 291 pneumonia deaths were reported in children less than 5 years old (44% of which were between 2-11 months age group), which represents 18% less than the average reported in the last three years (2008-2010).
In Argentina, according to national laboratory data, for EW 40, among all samples tested (n=249), the percentage of samples positive for respiratory viruses was 15%, and the circulation of RSV continued to decrease since its peak in EW 26. Concerning influenza viruses, a decreasing trend of influenza A cases has been reported since its peak in EW 28. Among subtype influenza A cases, co-circulation of influenza A/H3 and influenza A(H1N1) pmd09 continued to be observed.

In Brazil, in Belo Horizonte, in 2011, through EW 40, a total of 531 SARI cases and 29 SARI deaths were reported. Of all tested samples of SARI cases (n=423), ~8% were positive for influenza A. According to Adolfo Lutz laboratory data (Sao Paulo), in EW 39, among all samples tested (n=14), no positive samples for respiratory viruses were detected.

In Chile, in EW 40, ILI activity (4.9 consultation per 100,000 inhabitants) at national level, was similar to previous week (4.2 consultation per 100,000 inhabitants), and remained within expected level for this time of year. In EW 40, the percentage of emergency department admissions for respiratory causes in children under 15 years old continued to decrease and was below that observed in 2010. Through EW 40, 14 deaths associated with influenza A(H1N1) pmd09 were reported, 12 of them with at least one co-morbidity. According to the virologic data, in EW 40, among samples tested, at national level, the percent positivity for respiratory viruses was 11%, 52% were positive for parainfluenza and 4% for RSV. RSV continued to decrease since peaking in EW 22. Concerning to influenza viruses, in EW 40, influenza A accounted for ~18% of the detected viruses, influenza A(H1N1) pmd09 was the predominant virus with a decreasing trend since its peak in EW 32, followed by influenza A/H3.

In Paraguay, in EW 40, the proportion of ILI consultations was 6%, which was lower than the previous week (7.5%). The proportion of SARI hospitalizations, ICU admissions and deaths remained below 10%. According to laboratory data, in EW 40, of all samples tested, no positive samples for respiratory viruses were detected. The activity of respiratory and influenza viruses remained low since EW 34.

In Uruguay, in EW 41, the proportion of SARI hospitalizations, ICU admissions and deaths remained <5%. These proportions have continued to decrease since peaking in EW 31.
Recommended composition of influenza virus vaccines for use in the 2012 southern hemisphere influenza season

The World Health Organization (WHO) convenes technical consultations in February and September each year to recommend viruses for inclusion in influenza vaccines for the northern and southern hemispheres, respectively. This recommendation relates to the influenza vaccines for the forthcoming influenza season in the southern hemisphere (2012).

From February to September 2011, influenza was active worldwide. In general, activity was low or moderate in comparison with previous years and was due to circulation/co-circulation of influenza A(H1N1)pdm09, A(H3N2) and B viruses.

In September 2011, WHO recommended that vaccines for use in the 2012 influenza season (southern hemisphere) contain the following:

- an A/California/7/2009 (H1N1)pdm09-like virus;
- an A/Perth/16/2009 (H3N2)-like virus;
- a B/Brisbane/60/2008-like virus.

Standardization of terminology of the pandemic A(H1N1)2009 virus

The pandemic A(H1N1)2009 virus has become a seasonal virus, continuing to circulate with other seasonal viruses since August 2010 when WHO declared the end of the (H1N1) 2009 pandemic. However, the nomenclature of the virus has never been standardized, resulting in diverse names for the same virus. In order to minimize confusion, and to differentiate the virus from the old seasonal A(H1N1) viruses circulating in humans before the pandemic (H1N1) 2009, the Advisers to the WHO Consultation on the Composition of Influenza Vaccines for the Southern Hemisphere 2012, after discussion on 26 September 2011, advise WHO to use the nomenclature below:

A(H1N1)pdm09

This standardization will help to minimize potential confusion among the scientific community as well as the general public.
Graphs

North America

Canada

Influenza-like illness (ILI) consultation rates, Canada, by report week, 2011-2012 compared to 1996/97 through to 2010/11 seasons (with pandemic data suppressed)

Percent positive influenza tests, compared to other respiratory viruses, Canada, by reporting week, 2011-2012

United States

Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, September 28, 2008 – October 8, 2011

Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, May 22 – October 1, 2011

México

Distribution of influenza and other respiratory viruses under surveillance by Epidemiological Week (EW), region / country, 2010-2011

Distribution of influenza and other respiratory viruses under surveillance by Epidemiological Week (EW), region / country, 2010-2011
**Caribbean**

**CAREC**

**Cuba and Dominican Republic**

**Martinique**

**Graph A:** SARI Admissions and SAHI Admissions Rate per 100 Hospital Medical Admissions from Sentinel Sites in Sub-Saharan CAREC Member Countries, 2011

**Distribution of influenza and other respiratory viruses under surveillance by Epidemiological Week (EW), region / country, 2010-2011**

**Cuba**

**Dominican Republic**

**Martinique**

*N* 2009;

*Source:*) SOS Médecins Martinique
Central America

Costa Rica, El Salvador, Guatemala y Nicaragua

Costa Rica

Distribution of influenza and other respiratory viruses under surveillance by Epidemiological Week (EW), region / country, 2010-2011

El Salvador

Distribution of influenza and other respiratory viruses under surveillance by Epidemiological Week (EW), region / country, 2010-2011

Guatemala

Distribution of influenza and other respiratory viruses under surveillance by Epidemiological Week (EW), region / country, 2010-2011

Nicaragua

Distribution of influenza and other respiratory viruses under surveillance by Epidemiological Week (EW), region / country, 2010-2011

Honduras

% ILI consultation, 2011

Distribución de las atenciones por EIT, Vigilancia centinela de influenza, semana epidemiológica No 39, Honduras, 2011

% IRA cases

Distribución por IRA, vigilancia centinela de influenza, Semana epidemiológica No. 39, Honduras, 2011
South America - Andean

Bolivia

Bolivia – La Paz
SARI surveillance

INLASA Laboratory (La Paz, Bolivia)
Distribution of influenza and other respiratory viruses under surveillance by Epidemiological Week (EW), region/country, 2010-2011

Colombia y Ecuador

Colombia

Distribution of influenza and other respiratory viruses under surveillance by Epidemiological Week (EW), region/country, 2010-2011

Ecuador

% SARI: hospitalization, UCI admissions and deaths, 2011
IRAG(%): hospitalizaciones, admisiones a UCI y fallecidos de la SE 11 a la SE 40. Ecuador, 2011

Peru

ARI reported in children ≤ 5 years. Peru – 2011

Pneumonia reported in children ≤ 5 years. Peru, 2011
Paraguay

% ILI consultation by EW, 2011

% Hospitalizations, ICU admissions and death for SARI, by EW, 2011

Distribution of respiratory viruses, by EW, 2011

Uruguay

% hospitalization, ICU admissions and deaths for SARI

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2 US Surveillance Summary. Week 40. Centers for Disease Control and Prevention
3 Surveillance de la Bronchiolite. Le point épidémiologique — N° 01 | MARTINIQUE | / Semaine 2011-40
4 Honduras. Vigilancia centinela de Tegucigalpa y San Pedro Sula. SE 40
6 Colombia. Instituto Nacional de Salud.
9 Chile. Informe de situación. SE 40. www.pandemia.cl
13 World Health Organization. WHO. Available at: http://www.who.int/influenza/gisrs_laboratory/terminology_ah1n1pdm09/en/